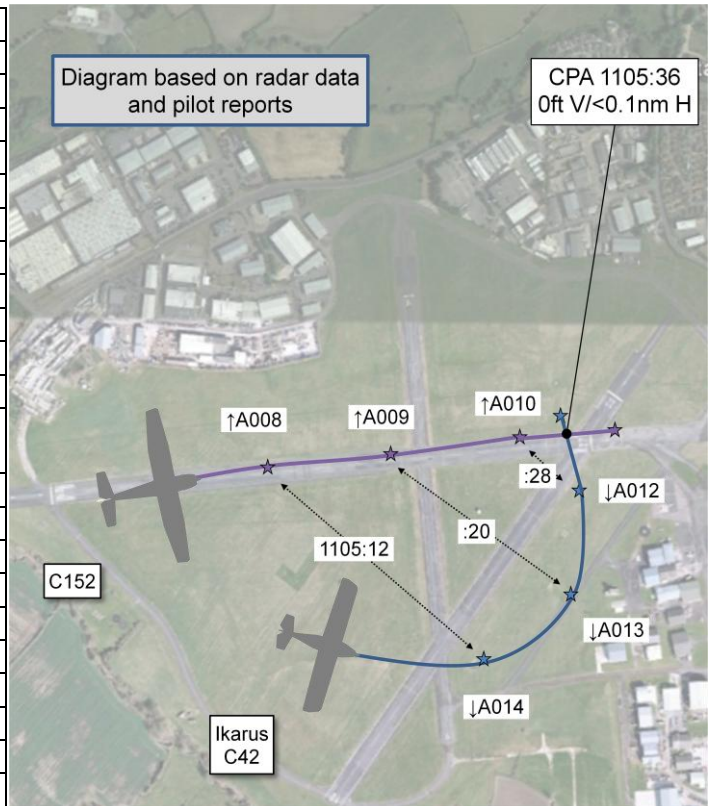


AIRPROX REPORT No 2015083

Date: 8 Jun 2015 Time: 1105Z Position: 5153N 0021W Location: Gloucestershire Airport

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Ikarus C42	Cessna 152
Operator	Civ Pte	Civ Trg
Airspace	ATZ	ATZ
Class	G	G
Rules	VFR	VFR
Service	Aerodrome	Aerodrome
Provider	Gloucester	Gloucester
Altitude/FL	1100ft	1100ft
Transponder	A, C, S	A,C
Reported		
Colours	White/red	White/red/blue
Lighting	Strobe on rudder	Anti collision/landing
Conditions	VMC	VMC
Visibility	>10km	N/K
Altitude/FL	1300ft	N/K
Altimeter	QFE (1031hPa)	NK
Heading	310°	N/K
Speed	80kt	N/K
ACAS/TAS	Not fitted	Not fitted
Separation		
Reported	10ft V/<100 H	N/K V/N/K H
Recorded	0 V/<0.1nm H	



THE IKARUS C-42 PILOT reports joining the Gloucestershire circuit via the overhead at 2200ft for a left-hand circuit for RWY04. He was aware that an aircraft had been told to abandon its approach because it had lined up on RW09 rather than RW04. After descending to 1300ft on the deadside and then turning to cross the upwind end of RW04, he saw a Cessna about 100 ft away, slightly lower but in a climbing attitude left to right. He banked steeply to the left and the Cessna passed down his right side underneath him.

He assessed the risk of collision as 'High'.

THE CESSNA 152 PILOT reports being on a first solo cross-country flight. He joined the overhead for RW04 left hand and descended on the deadside. Unfortunately he became disorientated and lined up on final for RW09 rather than RW04. He discontinued the approach and climbed to 2000ft to re-orientate himself and then reposition in the circuit for RW04. He did not see the other aircraft; therefore he did not have an assessment of risk.

THE GLOSTER CONTROLLER reports operating the circuit 04 left hand. The Ikarus C42 was joining deadside to join the circuit. The Cessna 152 pilot reported final RW04 to land. He noticed that the Cessna was lined up with RW09 so he instructed the pilot to go around as a helicopter was blocking that runway. The Cessna 152 pilot elected to climb back into the overhead rather than join downwind left hand. Traffic Information was given to both pilots.

He did not rate the risk of collision.

Factual Background

The Gloucestershire weather at the time was:

EGBJ 081050Z 01007KT 9999 SCT040 16/05 Q1035

Analysis and Investigation

CAA ATSI

ATSI had access to both pilot reports, the controller report, the Swanwick Area Radar recording and recordings of the Gloster Tower and Approach frequencies. The C152 was a student pilot. The C42 was approaching Gloucester from the south. Both aircraft initially contacted Gloster Approach and received a Basic Service.

Just prior to the radio recording (which started at 1053:00) the C152 made contact with Gloster Approach on 128.55. At 1053:04 a Basic Service was agreed with the C152 and the pilot was advised that the runway had just changed to RW04 (from RW09). The C152 was cleared for a standard overhead join and told to report at 3nm from Gloucester.

At 1056:50 the C42 contacted Gloster Approach and a Basic Service was agreed. The C42 was cleared for a standard overhead join and told to report at 3nm from Gloucester. At 1059:30 the C152 reported 3nm and was instructed to contact Gloster Tower.

At 1100:18 the C152 contacted Gloster Tower and was instructed to report downwind left for RW04. The pilot replied "report downwind". At 1100:31 the C42 reported at 4nm from Gloster and was instructed to contact Gloster Tower. At 1102:40 the C42 reported 2nm to run to the overhead and was instructed to join downwind left for RW04.

At 1102:52 the C152 pilot reported downwind and then, at 1103:58, reported finals. The controller then advised the C152 to Go-around because the pilot was on finals for RW09 and there was helicopter traffic in the circuit. The controller – knowing that the pilot was a student – offered the pilot a choice of returning to the overhead for a deadside join again, or positioning downwind for RW04. The pilot elected to climb back into the overhead. At 1104:47 the controller passed traffic information to the C42 about the C152. The C42 reported descending on the deadside. The controller immediately gave traffic information to the C152 about the C42.

CPA occurred between 1105:30 (Figure 1) and 1105:34 (Figure 2).

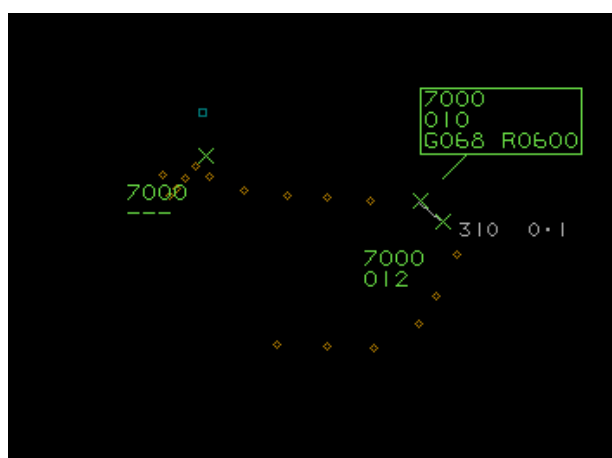


Figure 1 – (Swanwick MRT at 1105:30) The C152 was heading east and indicating 1000ft, the C42 was in a left turn and indicating 1200ft.

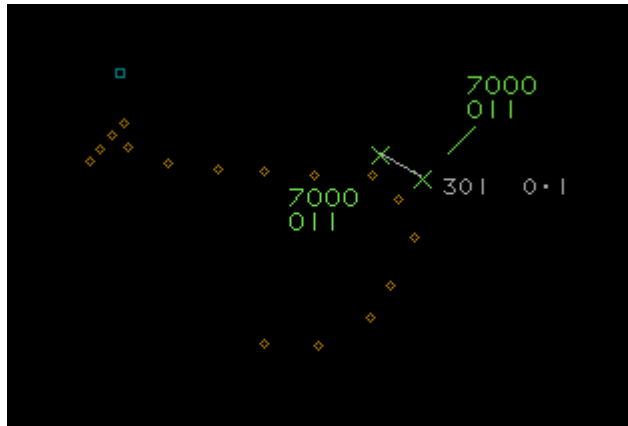


Figure 2 - (Swanwick MRT 1105:34) The C152 was the easterly of the two contacts.

Aerodrome Control shall issue information and instructions to aircraft under its control to achieve a safe orderly and expeditious flow of air traffic....¹

Aerodrome Control is not solely responsible for the prevention of collisions. Pilots and vehicle drivers must also fulfil their own responsibilities in accordance with the Rules of the Air.²

UKAB Secretariat

Both pilots shared an equal responsibility for not flying into such proximity as to create a collision hazard³. An aircraft operated on or in the vicinity of an aerodrome shall⁴:

- (a) observe other aerodrome traffic for the purpose of avoiding collision;
- (b) conform with or avoid the pattern of traffic formed by other aircraft in operation;

Summary

An Airprox was reported on Monday 8th June 2015 when a Cessna 152 and an Ikarus C42 flew into proximity in the circuit at Gloucestershire Airport. Both aircraft were operating VFR in VMC under an Aerodrome Control Service from Gloucester Tower. The C152 was going around and climbing into the overhead having made an approach to RW09 by mistake; the C42 was approaching the upwind threshold whilst conducting an overhead join for RW04.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft, transcripts of the relevant RT frequencies, radar photographs/video recordings, reports from the air traffic controllers involved and reports from the appropriate ATC and operating authorities.

The Board first turned their attention to the actions of the pilots concerned. They noted that the C152 pilot had joined the circuit from an overhead join just after the runways had been changed from 09 to 04. He was correctly using a 'Student' callsign to alert others of his status, and ATC were aware. Members commented that it was unfortunate that he made an error by positioning on final for the wrong runway, but they agreed that he complied quickly with ATC instructions to commence a go-around and, when given the choice, made a sound decision to climb back into the overhead and reorientate himself as to the runway layout of an airfield unfamiliar. GA members commented that at this stage the student would no doubt have been flustered, and they speculated that his lookout and

¹ CAP 493 Section 2 Chapter 1 2.1

² CAP 493 Section 2 Chapter 1 2.1(Note)

³ SERA 3205, Proximity.

⁴ SERA.3225, Operation on and in the vicinity of an aerodrome.

ability to gain situational awareness from others making radio calls would no doubt have deteriorated as he concentrated on positioning himself correctly for the overhead and working out why he had made the mistake. They also commented that as he climbed out the C42, descending from his high 3 o'clock position would likely have been obscured by the high wing of his aircraft.

As for the Ikarus C42 pilot, several Board members commented that, although technically keeping to CAA guidelines regarding an overhead join, the track he had chosen to fly was a little tight and this would also have increased his rate of descent on the deadside, exacerbating the visibility problem for the C152 high-wing aircraft pilot. Members thought that, bearing in mind the C42 pilot had been told the Cessna was repositioning, it may have been more prudent to fly a wider pattern in order to give more time to spot the conflicting traffic. One Board member commented that the overhead join the C42 pilot had flown seemed more appropriate in its dimensions to RW09 than to RW04; they wondered whether the C42 pilot had also been somewhat caught out by the runway change and been forced into a tighter pattern than normal [Post Board comment: The C42 pilot commented that he was familiar with Gloucester, had been passed RW04 on joining and that the P2, also a pilot, had a flight guide open at the Gloucester entry. He also stated that, after consideration of events, he should have remained in the overhead, maintaining sight of the student pilot, until the student had at least positioned himself on the downwind for RW04. The C42 pilot noted that he had used precisely this technique at another airfield a few weeks after the Airprox event, keeping the other aircraft in sight and descending behind it].

Turning to ATC, members complimented the controller for giving the student pilot the option of turning downwind or climbing above the circuit to re-orientate himself. They also noted that Traffic Information had been given to both pilots by ATC, and so both were made aware of each other at an early juncture. They commented that it was unfortunate that the C42 had then tracked almost directly overhead the control tower thus obscuring the view of the controller and compromising any chance he might have had to provide further warnings to each pilot.

It was agreed that although both pilots shared an equal responsibility to avoid each other, the C42 pilot, who was joining the circuit, had a duty to integrate with those who were already established within. As a result, they determined that the cause of the incident had been that the Ikarus C42 pilot had flown into conflict with the C152. When considering the risk, it was agreed that action had been taken by the C42 pilot to avoid the aircraft colliding, but that safety margins had been much reduced below the normal.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The Ikarus C42 pilot flew into conflict with the C152.

Degree of Risk: B.